BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

In the Matter of	)	
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	

REPLY COMMENTS OF THE MAINE PUBLIC ADVOCATE

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I. INTRODUCTION

The Maine Office of the Public Advocate ("OPA") hereby submits these reply comments in response to the comments filed by AT&T and by Verizon on the alternative proposals for a Non-Rural USF support mechanism.

The Telecommunications Act of 1996 and the recent 10th Circuit Court decision[1] require that the Commission establish a universal service fund based on the principle that rates for services in rural areas should be reasonably comparable to the rates charged for similar services in urban areas. In order to fulfill that mandate, the FCC has established the Non-Rural mechanism that is based on the relationship between national average cost and state average cost.[2] In our Comments filed May 8, 2009, we noted that providing support to non-rural wire centers contradicts the basic reason for the support and results in providing an overall amount of support that is excessive because it is greater than the amount of support sufficient to meet the requirements of the Telecommunications Act and the recent 10th Circuit Court decision. To correct this problem, the OPA recommends that the Commission limit the provision of high-cost support only to rural wire centers.

AT&T and Verizon each present a set of different ideas.

II. REPLY TO AT&T'S COMMENTS

While the AT&T comments appear to set out in the correct direction by focusing on the need to provide comparable services and to update the universal service funding mechanism, the AT&T proposal is neither comprehensive nor sufficient. Instead, the AT&T proposal will

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[1] *Qwest Communications Int'l, Inc. v. FCC,* 398 F.3d 1222 (10th Cir. 2005) (*Qwest II).*

[2] A carrier's ability to maintain reasonably comparable rates is dependent on the cost of service in high-cost rural areas compared to the cost of service in urban areas, and on the carrier's ability to obtain other non-federal universal service revenue to close the gap between the revenue and the cost of service in high-cost rural areas. Hence, it reasonable to determine the amount of support by using a cost comparison rather than a comparison of current rates.

provide AT&T with funding to build low-speed broadband facilities in those very service territories that AT&T has allowed to languish – as a consequence of the AT&T policy that reduced telecommunications net investment by 57 percent from 1996 to 2007.[3]

The OPA agrees with the general principles that are the foundation of the AT&T proposed reforms. Those include the need: 1) to provide both comparable rates and comparable advanced services in rural and high-cost areas; 2) to target support to rural and high-cost areas; 3) to eliminate state-wide averaging; 4) to condition support on fulfilling universal service objectives; and (5) to consolidate, whenever possible, the rural and non-rural support mechanism. However, the OPA disagrees with the specific AT&T proposals and mandates because those proposals and mandates would not lead to comparable rates and services in urban and rural areas of the country.

A. Comparable Services

Providing "comparable services" requires a definition of those services, and the development of a plan that will lead to near ubiquitous deployment of such services. AT&T recommends that the Commission adopt the broadband services definition of advanced services contained in the Telecommunications Act of 1996 as the basis for determining whether a consumer has the ability to purchase broadband services. That definition would allow users "to originate and receive high quality voice data, graphics and video telecommunications."[4] Adopting that definition would significantly enhance the service available to almost every American -- whether living in either urban or rural areas -- because very few consumers currently have the ability to originate high quality video telecommunications. On the other hand, a more limited definition --one that would allow for receiving video services -- appears to be

[3] According to the ARMIS 43-01 Report, AT&T's net investment in telecommunications was approximately $59 billion in 1996 and was reduced to approximately $25 billion in 2007.
[4] 47 U.S.C. § 706 (c)(1).

within the capabilities of many urban customers and could be used as a definition of comparable service.

AT&T further recommends that carriers be enticed by a grant program to provide broadband services through. The grant program will enable carriers to collect funds toward the building of a network that would provide advanced services. Under AT&T's recommendation, however, there is no standard to determine how much of the network investment should be financed by the grant and how much the carrier should finance. If the grant finances a significant portion of the investment, then the carrier's costs are substantially reduced. The plan does not address the question of whether the rate in rural areas should be reduced accordingly. Rather, AT&T suggests that the rate in rural areas should be comparable to the urban rate. But if the grant reduces the rural cost below the urban rate, then it would appear on the basis of a just and reasonable standard that the rural rate should be less than the urban rate.

AT&T also suggests that participation in the broadband deployment fund would be voluntary. However, a voluntary standard could leave many areas without comparable service. Moreover, a voluntary standard would induce carriers to redline areas that are either high-cost or low-revenue areas. While many regulators have dismissed claims that carriers would "redline" particular areas of their service territory, the recent Verizon application for provision of cable service in the District of Columbia shows that redlining is alive and well. The District of Columbia is a very small and densely populated area. It is served predominately by conduits and poles with almost no buried cable. Hence, the District would appear to be the sort of jurisdiction where the deployment of Verizon's fiber network, FiOS, would be a low-cost undertaking. However, in its

initial application, Verizon redlined approximately 40 percent of its customers.[5] On reconsideration, Verizon amended its plan and will now consider expanding its service upgrade to all areas of the District, depending on a number of circumstances. If all carriers in rural areas were permitted to proceed on a voluntary basis, carriers, could redline significant portions of the country, or delay deployment in certain areas for a substantial period of time. Therefore, as the Maine OPA comments suggest, it is imperative that a broadband deployment plan be both mandatory and comprehensive. Any carrier requesting funds to serve a portion of its service territory should be required to submit a plan that would require the carrier to provide broadband service to its entire service territory within a specified time period. If the carrier fails to fulfill that plan its support levels would be reduced.

B. Reasonable and Affordable Rates

While AT&T acknowledges that low-income customers may require assistance in purchasing advanced services, it believes that the rates for advanced services are, in general, reasonable and affordable. AT&T asserts that "the best evidence of whether a rate is affordable is that consumers are willing and able to pay that rate in order to obtain a particular good or service. Thus, to determine whether rates for a particular service are affordable, the Commission should consider evidence that consumers are subscribing to a service at high levels of penetration and the range of rates at which they are obtaining such service."[6] In the very next paragraph, however, AT&T admits that consumers are not purchasing broadband service at very high levels. Thus, by its own argument, ATT&T indicates that broadband service is not affordable.

Moreover, the existence of a "willingness to pay" does not mean that a rate is

[5] Appendix A, Verizon Exhibit A attachment to its franchise application, and Appendix B, Letter from John Conwell, Vice President for Government Affairs, Comcast to the honorable Mary M. Cheh, Council of the District of Columbia, October 20, 2008.
[6] ATT Comments, page 8-9.

just and reasonable. When a monopolist sets a price and consumers purchase a good at that price, that purchase confirms a "willingness to pay" even though the price is greater than a "just and reasonable" rate. AT&T asserts that the prices for broadband services are just and reasonable because the FCC has noted that competition in the broadband markets ensure reasonable prices.[7] Such a finding is confusing to every consumer actively engaged in the market. Every consumer knows that there are, in general, two providers of broadband service, the local cable provider and incumbent local exchange carrier. Such a duopoly cannot be relied on to generate just and reasonable rates. As the FCC staff has noted, as long as a duopoly persisted in the wireless industry, the per-minute rate was generally between 40 and 50 cents. Only after the FCC took action to increase the number of wireless carriers from two per geographic area to between four to seven carriers per geographic area did the wireless rates fall to less than 10 cents per minute.[8] No one expects that there will ever be four to seven facilities-based broadband providers. Therefore, it is necessary either to rely on the kindness of the duopoly or to establish a 'just and reasonable' regulatory standard for broadband service.

The OPA submits that, in order to ensure just and reasonable broadband rates, the FCC needs to revise the definition of "basic service" in such a way that basic service is upgraded to match needs of the broadband era. The FCC can then predicate the receipt of universal service funds on the carrier agreeing to offer a broadband service package at a just and reasonable rate. For example, the OPA suggests that such a rate for unlimited local and unlimited long-distance service and tier-one data service should be $45 per month. Such a rate would not only be just and reasonable, but also would be affordable to middle-class America. It would fulfill the universal-service goal of bringing access to advanced services to every customer.

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[7] ATT Comments, page 8, footnote 16.
[8] Thomas J. Sugrue, Opening Remarks, Seventh Annual CMRS Report, June 13,, 2002.

C. Funding Universal Service

AT&T recommends that universal service should not longer be support by a fee that is based on interstate revenue. Rather AT&T recommends that the fee be based on the numbers of connections. It bases this suggestion on the fact that traditional interstate long-distance services have been decreasing and, as a result, interstate revenue has been decreasing, leading to increases in the universal service fee.

However, there are many problems with AT&T's suggestion. First, it is very difficult to integrate special-access services into a numbers-based funding system. Special access is growing service that provides significant interstate revenues. Switching to a numbers-based system would cause regulators either to establish an arbitrary solution to this problem, or to eliminate the special-access contribution. Establishing an arbitrary solution would lead to years of litigation and eliminating the contribution would shift more of the burden of universal support to residential customers, which, of course, would negate the purpose of the universal service fund. Second, the AT&T suggestion ignores the fact that consumers are now buying long-distance service that is bundled in packages with other services. These packages allocate a percentage of the package revenue to interstate long-distance service. The package provides a stable source of interstate revenue and thus, a stable foundation for the universal service fund. Third, given that AT&T supports providing universal service funding for broadband services it is appropriate to levy the universal service fees on DSL, cable modem and video services. Extending the revenue base in this fashion would allow the Commission to reduce the universal service fee. While this action will reverse previous Commission decisions on the application of the USF fee to DSL and to cable modem service, there is now good reason to do so. Those decisions were made at a time when broadband services were not included in the supported

service list. At the time, the Commission did not anticipate that the broadband services would be added to the supported service list.

D. Conditioning Universal Service Funding

AT&T recommends that the recipients of universal service funding should be required to eliminate any implicit subsidies still remaining in state intrastate access rates. It asserts that while the state intrastate access rates are the source of major implicit subsidies, that this subsidy source is eroding due to the reduction in minutes and is therefore an unsustainable source of universal service funding. AT&T further suggests that the Commission should eradicate state implicit access subsidies, which it claims pose a formidable obstacle to the promotion of broadband deployment. Finally, AT&T suggests that universal service funding should be used to offset the reductions in intrastate access rates.

1. Reducing Implicit Subsidies

AT&T asserts again that intrastate access rates are the major source of subsidies that non-rural carriers to use to recover the cost of providing service in rural high cost areas. This claim has been made over and over again. Its proponents take it as a matter of faith that the Commission must recognize and eliminate this alleged subsidy. The debate over whether subsidies exist has always been contentious. Finding that a subsidy exists justifies a party's claim to a rate reduction. Without finding that a subsidy exists, that party seeking a rate reduction appears to be simply a greedy stakeholder, requesting rate relief and imposing costs on other parties.

To clarify the subsidy issue, it is necessary first to examine the definition of a subsidy. A generally accepted definition of a subsidy is that service is subsidized if its price is less than

incremental cost and the service pays out a subsidy if its price is above the stand-alone cost.[9] Applying this definition to the telecommunications is a problem because the telecommunications technologies are dominated by joint and common costs, and because those technologies exhibit few incremental or marginal costs. For instance, the Commission has noted that "the cost of the local loops and their associated line cards in local switches, for example, are common with respect to interstate access service and local exchange service, because once these facilities are installed to provide one service they are able to provide the other at no additional cost."[10] More recently, the Commission has also noted:

> For example, a copper loop can be used to provide analog voice service as well as data service using DSL technology. The cost of the loop is therefore common to both voice and DSL services. The incremental cost of voice service, assuming that DSL is already provided, therefore does not include any of the long run incremental cost of the loop itself. Similarly, the incremental cost of DSL, assuming voice is already provided, includes only that portion that may be required to condition the loop to meet the higher quality standards that may be required for the data transmission.[11]

The implications of these cost relationships are extremely important. For example, one leading economist stated:

> [M]any important industries involve technologies that exhibit increasing returns to scale, large fixed and sunk costs, and significant economies of scope. Two important examples of such industries are telecommunications services and information services. In each of these cases the relevant technologies involve high fixed costs, significant joint costs and low, or even zero, marginal costs. Setting prices equal to marginal cost will generally not recoup sufficient revenues to cover the fixed cost and the standard economic recommendation of 'price at marginal cost' is not economically viable.[3412]

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[9] G.R. Faulhaber, 1975, Cross-subsidization: pricing in public enterprise, *American Economic Review* 65, 966-977.
[10] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, FCC 96-325, rel. August 8, 1996, (Local Competition Order), ¶ 678.
[11] In the Matter of High Cost Universal Service Support, Further Notice of Proposed Rulemaking, WC Docket No. 05-337, released November 5, 2008, Appendix A, ¶ 247.
[12] Hal Varian, Differential Pricing and Efficiency, First Monday (1996), available at http://www.firmonday.dk/issues/issue2/different; also quoted in the direct testimony of Dr. Jeffrey A. Eisenbach on behalf of Verizon Maryland in the Maryland Public Service Commission, Case No. 9133, filed July 8, 2008 [35] William J. Baumol and Daniel G. Swanson, The New Economy and

Other leading analysts have stated that: Because marginal cost is the added (variable) cost incurred by the supply of one additional unit of output, then, by definition, marginal cost does not include fixed or sunk costs. Neither of these costs is variable. Hence, "a price equal to marginal cost covers only variable costs and makes absolutely no contribution to recovery of either fixed or sunk costs. Such a price clearly is a recipe for insolvency."[13]

Applying these principles to the current proceeding leads to the conclusion that it is almost impossible to prove that any telecommunications service is receiving a subsidy because even in a rural network, once the network has been built, the incremental cost of local residential service is very low. However, in rural areas, it is generally true that the combination of all revenue is less than the total cost of the network including the joint and common cost and service incremental cost. Thus, it is rural networks that receive subsidies rather than any particular rural service.[14] The consequence of the rural network subsidy is that all users of the rural network -- inter-exchange carriers, wireless carriers, rural carriers, urban customers and rural customers -- receive some benefit from that subsidy.

With regard to AT&T's claim that state access charges are the major source of the rural subsidy, there are several key points that the Commission should note. First, while state access charges are at a level above interstate charges -- and probably above the incremental cost of service -- there has never been a showing that state access charges are greater than the stand-alone cost of providing state access service. Therefore, there is no support for the claim that the

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Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power, 70 Antitrust Law Journal, 2003, page 5. [36] Id. [37] *Local Competition First Report and Order*, ¶ 678.

[13] William J. Baumol and Daniel G. Swanson, The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power, 70 Antitrust Law Journal, 2003, page 5

[14] For a discussion of combinatorial cost See William J. Baumol and J. Gregory Sidak, Toward Competition in Local Telephony, MIT Press, 1994, pages 69-72.

state access rate is a rate that is based on a subsidy. Second, the fact that a rate is above the incremental cost of service does not prove that the rate generates a subsidy. Rather, it simply supports a claim that the state access revenue contributes to the support of the network joint and common cost.

On the other hand, it has been shown that the urban residential rate (the sum of the local service rate and the Subscriber Line Charge) is greater than the stand-alone cost of service for approximately 70 percent of residential lines.[15] Therefore, if any rate should be reduced in response to an increase in federal universal service support, it should be the urban residential line rate rather than the state intrastate access rate.

2. Implicit Subsidies and Broadband Deployment

AT&T's assertion that implicit intrastate access subsidies pose a formidable obstacle to the promotion of broadband deployment is based on the Phoenix Center Policy Bulletin.[16] The Bulletin contains an economic model that correlates carrier profitability with access charges and broadband deployment. By examining the conditions of profit maximization, the Bulletin concludes that high regulated switched access rates discourage broadband investments. The basis for this conclusion is that the provision of broadband service allows consumers to purchase local service from VoIP service providers such as Vonage. The VoIP service providers do not pay originating switched access charges and pay only reduced terminating access. Hence, by providing broadband service, the local carrier reduces its access revenue. In that situation, higher access rates translate into greater reduction in access revenue and profits. In short, the

[15] Robert Loube, "The Telecommunications Act of 1996: residential rates and competition, *Utilities Policy* 12 (2004) 139-152.
[16] Phoenix Center Policy Bulletin No. 22, "Do High Call Termination Rates Deter Broadband Deployment," T. Randolph Beard and George S. Ford, October 2008.

local carrier has an incentive to delay the deployment of broadband service in order to retain access revenue and profits.

The first problem with the Bulletin's analysis is that it contradicts the current state of the world. That is, rural carriers that have higher state access rates than non-rural carriers have deployed broadband services at a faster rate than non-rural carriers.[17] Of course, it is possible to argue that factors other than state access rates are responsible for the faster broadband deployment by rural carriers. Those factors may include rate-of-return regulation and the federal universal service High-Cost Loop Mechanism funding. For instance, it could be argued that the influence of the rate-of-return regulation and universal service funding overwhelm the impact of the implicit subsidy on broadband deployment, and that, the faster broadband deployment indicates the impact of rate-of-return regulation and universal service funding rather than the impact of the implicit subsidy. However, it could still be true, that -- holding everything else equal (a typical assumption in economic analysis) -- that high access rates deter broadband deployment.

The second problem with the Bulletin's analysis is that most carriers offer broadband service as part of bundle that includes local service, or as an add-on to local service. A customer who is buying the broadband service as part of bundle that includes local service has no incentive to purchase local service a second time from an independent VoIP provider. Hence, for the most part, the provision of broadband service does not lead to a customer choosing to obtain service from an independent VoIP provider. Of course, it is possible to purchase DSL service as a stand-alone service without local service and then purchase local and long distance service from an independent VoIP provider. However, in most cases, it would take a rocket scientist to find the rate and offering of stand-alone DSL service on the web page of any rural or non-rural carrier. If

[17] See the Comments of the Maine Office of the Public Advocate in this proceeding, pages 9-10.

a customer is plucky enough to call the carrier's business office and request stand-alone service, there is a high probability that the customer-service representative has never heard of the service, cannot find the rate for the service, and will try to entice the customer to purchase one of the carrier's bundles that include local service and DSL service. In other words, if the Phoenix Center's economic model were correct, the impact of the relationship between high access rates and broadband deployment is more likely to be trivial, rather than formidable.

The third problem with the Bulletin's analysis is that carriers deploy broadband service as part of a strategy to retain customers. It is well known that the more services that a carrier sells to an individual customer the less likely it is that that customer will switch to another carrier. The provision of broadband service provides the local carrier with an additional, attractive service. Broadband service complements the local carrier's other service offerings. Without broadband service, local carriers would encounter greater line losses to wireless and cable providers than otherwise would be the case. Moreover, it is obvious that local carriers are more concerned with the loss of lines to wireless and cable providers than they are about losing lines to independent VoIP providers. The consequence of this retention analysis is that the Phoenix Center's economic model is defective. The model is missing a term that shows the positive connection between broadband deployment and access revenue that results in the retention of customers that otherwise would be lost to wireless or cable providers. Once this term is added to the model, the model will no longer predict that high access rates would always lead to lower broadband deployment. Rather the model would indicate that the relationship between access rates and broadband deployment would depend on the relative size of the retention term and the VoIP-loss term. Given the real world importance of line losses to wireless and cable providers versus the

losses to VoIP providers, high state access revenue is more likely to encourage broadband deployment rather than to deter that deployment.

III. REPLY TO VERIZON'S COMMENTS

Verizon asserts generally that rural rates are currently comparable to urban and hence there is no need for additional universal service funding. While we admit that current rates appear to be comparable, we assert that that comparability is not sustainable. The comparability is a function of state ratemaking principles. Many states maintain study-area average rates. Other states have value-of-service pricing. Under value-of-service pricing schemes, urban rates are higher than rural rates because the urban local calling areas enclose a greater number of customers, providing a greater value of service in the local exchange. A few states do have slightly higher charges in rural areas, but those higher charges are less than the relative higher cost to serve those rural areas. The result of those ratemaking policies is that urban basic customers subsidize rural basic customers.

The fact that subsidy occurs provides an incentive for alternative carriers to enter the urban areas at rates below the incumbent's rate. The entrants may even have costs that greater than the incumbent's cost. But entrance into the market is still profitable as long the cost of the entrant is lower than the price the entrant is charging. The fact that such an incentive exists is the rationale for reforming universal service fund mechanisms.

We further realize that incumbent carriers have acted like the "boy who cried 'wolf.'" That is, for a long time they have called for the elimination of implicit subsidies, even though rivals had not entered their markets. However, now the wolf has finally appeared at the door. Cable providers are actively seeking incumbent local exchange carrier telephone subscribers.

Even though the incumbent carriers are still the dominant providers of telephone service, they are losing the ability to continue to subsidize rural rates with urban rates that are above the cost of service in urban areas. In short, the apparent rate comparability that currently exists is a product of history. It will be a mistake to believe that the carriers will be able to sustain an urban/rural rate comparability in the near future.

IV. CONCLUSION

For the foregoing reasons, the Federal Communications Commission should not accept the recommendations offered either by AT&T or by Verizon with respect to high-cost universal support. We recommend that instead the Commission modify the non-rural support mechanism as specified in the comments filed in this proceeding on May 8, 2009 by Dr. Robert Loube on behalf of the Maine Public Advocate.

Respectfully submitted,

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